

AMENDMENTS TO THE SPECIFICATION

Please insert the following new paragraph, beginning on page 1, line 4:

This application is a U.S. national entry of International Application No. PCT/NL2004/000499, filed on July 9, 2004, which claims priority to European Patent Application No. 03077183.6, filed on July 10, 2003.

Please insert the following new paragraph, on a separate page following the claims:

A process for producing hydrogen from bio-oxidisable material is disclosed herein. The process comprises the steps of - introducing the bio-oxidisable material into a reactor provided with an anode and a cathode optionally separated by a cation exchange membrane and containing anodophilic bacteria in an aqueous medium; - applying a potential between the anode and cathode 0.05 and 1.5 volt, while maintaining a pH of between 3 and 9 in the aqueous medium; - collecting hydrogen gas at the cathode. The hydrogen production process can be intermittently switched to an electric power generation stage (biofuel cell) by adding oxygen to the cathode and separating the anode and cathode spaces by means of a cation exchange membrane.